



# UNITED STATES PATENT AND TRADEMARK OFFICE

*Zeln*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,687	12/05/2001	Lorenz Fred Freiberg	21-3-11	7616
7590	12/08/2005		EXAMINER	
Docket Administrator (Room 3J-219) Lucent Technologies Inc. 101 Crawfords Corner Road Holmdel, NJ 07733-3030			HAMANN, JORDAN J	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/004,687	FREIBERG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jordan Hamann	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 December 2001.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,2,6-8,10,11 and 13-17 is/are rejected.  
 7) Claim(s) 3-6,9,12,18 and 19 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 05 December 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                              |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/5/01</u> . | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION*****Specification***

The abstract of the disclosure is objected to because line 5 "provided" should be "provides", line 9 is missing "and" between the listing of "static rate matching factor" and "the power-offset", line 14 "on" should be "one". Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: apparent grammatical or spelling errors and suggested changes; page 1 line 23 "efficient" should be "efficiently", on page 2 "wire" does not make sense in the context of the sentence on lines 12-14, page 3 line 14 "to" should be "too", page 3 line 21 "begin" should be "beginning", page 3 line 30 "that" should be "the", page 4 line 12 delete "an", page 4 line 13 "claim" should be "claims", page 4 line 18 and page 7 line 12 "on" should be "one", page 5 lines 2 and 22 and page 13 line 2 "an" should be "a", page 5 line 20 delete "to", page 12 line 32 delete "be", page 132 line 35 "propose" should be "proposed", page 14 line 18 delete "a", and page 15 line 5 "NodeBs" does not make sense.

The disclosure is objected to because the foreign priority claim on page 1 of the specification is to EPO application 00311161.4-2211 filed June 28, 2001. However the Declaration claims foreign priority to, and the certified foreign document submitted by applicant is EPO application 0031161.4 filed on 14 December 2000.

Appropriate correction is required.

Claims 9-11 are objected to because of the following informalities: "respond" should be "response". Appropriate correction is required.

Claim 11 is objected to because of the following informalities: "claims" should be "claim". Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 claims a method disclosed in European patent applications.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 8, 10, 11, 14, 15 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Palenius (US 6,904,290).

With respect to claim 1, Palenius discloses in column 2 line 43 to column 2 line 10 and column 3 lines 37-58 a method of controlling quality of service of a CDMA-based

system, especially of a CDMA-based telecommunication network, transmitting a plurality of different services between the system and a user equipment by using at least one data channel (DPDCH) with the services multiplexed and rate matching technique applied and an associated control channel, comprising (DPCCH) the step of:

deriving for the services to be transmitted and for the control channel default quality requirements necessary to achieve desired quality of services,

based on the default quality requirements determining of a plurality of initial parameters representing transmitting properties concerning the quality of service,

dynamically adjusting each of said initial parameters in dependence of quality estimates (BER/BLER) performed during data transmission on each of said services.

With respect to claim 2, Palenius discloses the method of claim 1, wherein the parameters representing transmitting properties concerning the quality of service comprise a static rate matching factor (SRF) for each service, a signal to interference ratio (SIR) for the control channel (DPCCH) and a power-offset (G) between the control channel (DPCCH) and the at least one data channel (DPDCH) (column 5 lines 10-15 and column 6 line 59-64).

With respect to claim 8, Palenius discloses the method of claim 1, wherein the step of dynamically adjusting is performed by using actual bit-error-rates (BER) of each transport channel (TrCH) after decoding and/or block-error-rates (BLER) related to a single service, respectively (column 5 lines 4-7).

With respect to claim 10, Palenius discloses the method of claim 1, wherein the step of dynamically adjusting comprises the adjustment of the signal to interference

ratio (SIR) for the control channel (DPCCH) by use of an outer loop power control in respond to a comparison of the quality estimates (BER/BLER) with pre-definable thresholds (column 1 line 66 to column 2 line 10).

With respect to claim 11, Palenius discloses the method of claim 10, wherein the step of dynamically adjusting comprises the recalculation of a power offset (G) between the control channel (DPCCH) and the at least one data channel (DPDCH) in respond to a comparison of the signal to interference ratio (SIR) with a further pre-definable threshold (column 5 lines 10-15).

With respect to claim 14, Palenius discloses the method of claim 1, wherein the at least one data channel and the control channel is provided by a dedicated physical data channel (DPDCH) and a dedicated physical control channel (DPCCH), respectively (column 2 lines 46-56).

With respect to claim 15, Palenius discloses in column 2 line 43 to column 2 line 10 and column 3 lines 37-58 a CDMA-based system, especially a mobile telecommunication system, adapted for transmitting a plurality of different services between the system and a user equipment by using at least one data channel (DPDCH) with the services multiplexed and rate matching technique applied and an associated control channel (DPCCH), comprising

means for providing default quality requirements necessary to achieve a desired quality of service with regard to the services to be transmitted and to the control channel,

means for performing quality estimates during data transmission on each of said services, and

means for determining parameters based either on the default quality requirements or on the quality estimates representing a static rate matching factor (SRF) for each service, a signal to interference ratio (SIR) for the control channel (DPCCH) and a power-offset (G) between the control channel (DPCCH) and the at least one data channel (DPDCH) (column 5 lines 10-15 and column 6 line 59-64).

With respect to claim 17, Palenius discloses the CDMA-based system of claim 15, wherein the means for performing quality estimates uses actual bit-error-rates (BER) of each transport channel (TrCH) after decoding and/or block-error-rates (BLER) related to a single service, respectively (column 5 lines 4-7).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palenius (US 6,904,290).

With respect to claim 13, Palenius discloses the method of claim 1, see 102 rejection above, however does not expressly disclose wherein the method is performed within an UMTS-System.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the method of Palenius in an UMTS-System.

The motivation for doing so would have been to use the method in well-known and standardized system.

Therefore, it would have been obvious to use the method of Palenius in an UMTS-System to obtain the invention as specified in claim 13.

With respect to claims 7 and 16, Palenius discloses the method of claim 1 and the system of claim 15, see 102 rejections above, however does not expressly disclose handing the initial and/or adjusted parameters to a physical layer within pre-definable time intervals.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to periodically update the calculated parameters and pass them onto the physical layer.

The motivation for doing so would have been to avoid signal degradation and signal interference for each remote station as users demand a variety of services (column 3 lines 37-40 and column 2 lines 26-32).

Therefore, it would have been obvious to update the parameters of Palenius to obtain the invention as specified in claims 7 and 16.

#### ***Allowable Subject Matter***

Claims 3-6, 9, 12, 18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Andersson (US 5,335,356) discloses measuring and evaluating parameters indicative of transmission quality to ensure adequate transmission quality and ultimate satisfaction of the subscriber in the face of continually varying transmission quality of a mobile telephone system.

Blanc (US 6,341,225) discloses a method for improving the performance of a mobile communication system by using a power control loop.

Agin (US 6,564,067) discloses a method for setting a transmission quality target value for power control in a mobile communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan Hamann whose telephone number is (571) 272-8564. The examiner can normally be reached on Monday-Thursday 8:30-5:00 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2667

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJH



CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TELECOM BOX CENTER 290 12/6/05